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Site 3096: Shawano County, Township 29N, Range 14E, Section 19; Township 29N, Range 14E, Section 20. 1950-06-21

[s.l.]: [s.n.], 1950-06-21

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STAND RECORD

FORESTS

Stand No. 3096

Name:

County: Shawano

Date: June 21, 1950

Size of Stand: 40

Forest Type: Pine

Topography: slight slope

Locality: on Highway 47, W. of Neopit 1/2 mile

T: 29N R: 14E Sec: 19, 20

Observers: Cottam, et al

Size of Area Sampled:

Soil Type: Vilas Fine Sand and Kenman Fine Sandy

Slope: 5% Directions NE Loam

Condition of Stand:

Excellent, No cutting Heavy understory of Hardwood

Open Grown Trees: 2 wh. pine several

% Canopy: 80% - 100

Stumps:

1.	4.	7.	10.
2.	5.	8.	11.
3.	6.	9.	12.

Soil Data:

	pH	N	P	K	Ca	Mg	Org. Mat.	Colloids	W.H.C.
A ₀									
A ₁									
A ₂									
B									

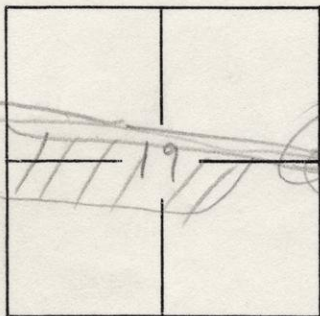
DEPTH

CHARACTERISTICS (Color, Texture, Structure, etc.)

A ₀	2"	Pine needles & mulch
A ₁	2-3"	Black to brown sandy loam
A ₂	2-3"	Grey sand - fairly well differentiated
B		Red sand

Parent Material:

Map:



Prob = .13

TREE DATA SUMMARY SHEET

Northern Pine-Hardwoods

Station Number:

2 Trees

3096

TREE	# PTS	# TRS	DOM. CLASSES			TOT. DOM.	# SAP	D. % SAP	F. % SDL.	F. % TRS.	% SUM F. TR.	D. % TRS.	DOM% TRS.	DFD INDEX	C. I.
			-80	-320	321										
Abies bals	5	6	2	4		497	16	10.5	1		7.5	7.5	5.0	20.0	140
Acer rubru	5	5	2	3		359	33	21.6	6		7.5	6.3	3.6	17.4	104
A. sacchar	7	7	6	1		293	65	42.5	6		10.5	8.8	3.0	22.3	223
A. spicatu															
Betula lut							1	0.7							
B. papyrif															
Carpinus c							2	1.3							
Fagus gran															
Ostrya vir															
Picea glau	6	6	4	2		500	2	1.3			9.0	7.5	5.1	21.6	130
Pinus Bank															
P. resinosa	16	20	7	13		2368	1	0.7			23.9	2.5	23.9	72.8	218
P. Strobus	23	31	11	14	6	5631	6	3.9	2		34.3	38.8	56.9	130.0	650
Populus ba															
P. grandid															
P. tremulo															
Prunus penn							4	2.6	3						
Quercus el															
Q. rubra	2	2	2			31	3	2.0			3.0	2.5	0.3	5.8	35
Tilia amer							8	5.2	2						
Tsuga cana	2	2	1	1		173					3.0	2.5	1.7	7.2	58
Thuja occi															
Ulmus amer															
U. fulva															
Fraxinifera	1	1	1			35	2	1.3			1.5	1.3	0.4	3.2	19
Prunus ser							8	5.2	1						
Fraxinifera							2	1.3	1						
	67	80	46	28	6	9887	153	100.1			100.2	100.2	99.9	300.3	1577

AVE. DIST. BTW'N TREES:

16.0

AVE B. A.:

123.3

TREES/ACRE:

196

DOM./ACRE:

24,167

1450

1450

POINT RECORD TREES

NORTHERN PINE-HARDWOODS

Stand No.

3096

STATION NO.	1	2	3	4	5	6	7	8	9	10
<i>Abies balsam</i>			✓	✓	✓	✓	✓	2		
<i>Acer rubrum</i>	2	2	✓	2	26	✓	✓	1	1	✓
<i>A. sacchar.</i>	33	2	12	32	17	2	4		3	4
<i>A. spicatum</i>										
<i>Betula lut.</i>										
<i>B. papyrif</i>										
<i>Carpinus car</i>										
<i>Fagus gran</i>										
<i>Ostrya virg</i>										
<i>Picea glau</i>		45	38	40			1			
<i>Pinus Bank</i>										
<i>P. resinosa</i>	170 (130)	200				155 (30)	240 (75)	75 (40)	150 (50)	240 (160)
<i>P. Strobus</i>	140	29	75 (215)	✓ 70	45 (30)	200 (40)	105 (85)	✓ 37 (105)		140
<i>Populus bals</i>										
<i>P. grand</i>										
<i>P. trem</i>										
<i>Prunus pen.</i>										
<i>Quercus ell</i>										
<i>Q. rubra</i>										
<i>Tilia amer</i>			2							
<i>Tsuga can</i>		22								
<i>Thuja occ</i>										
<i>Ulmus amer</i>										
<i>U. fulva</i>										
<i>Prunus serotina</i>		1	✓					1		✓
<i>Frax. am.</i>								✓	✓	✓
<i>Prunus virg</i>				1			1	2		✓
Distance	15	14	18	11	12	17	20	13	9	24

148
85

POINT RECORD TREES

NORTHERN PINE-HARDWOODS

Stand No. 3896

STATION NO.	1	2	3	4	5	6	7	8	9	10
<i>Abies balsam</i>					12	(29)	1	120 65	2	1
<i>Acer rubrum</i>	1	4	1				3			(13)
<i>A. sacchar.</i>	2		3	4	(12) (29)	3	1	(28)	2	135
<i>A. spicatum</i>										4
<i>Betula lut.</i>										
<i>B. papyrif</i>										
<i>Carpinus car</i>										
<i>Fagus gran</i>										
<i>Ostrya virg</i>										
<i>Picea glau</i>										
<i>Pinus Bank</i>										
<i>P. resinosa</i>	(200)	100	170	205 (70)		(310)				
<i>P. Strobus</i>	129.55 (450)	130 (70, 200)	32.0 (330, 160)	28 (200)	105	120 175	640 345 (190, 580)		685 370 (95)	110 (55)
<i>Populus bals</i>								(820)		
<i>P. grand</i>										
<i>P. trem</i>										
<i>Prunus pen.</i>										
<i>Quercus ell</i>										
<i>Q. rubra</i>										
<i>Tilia amer</i>						2		(17)	2	
<i>Tsuga can</i>										
<i>Thuja occ</i>										
<i>Ulmus amer</i>										
<i>U. fulva</i>										
<i>Fraxinus am</i>	1									
Distance	19.0	15.	29.0	19.5	28	18	17	9.5	12.0	14.5

23 13
9 9

POINT RECORD TREES

NORTHERN PINE-HARDWOODS

Stand No.

STATION NO.	21	22	23	24	25	26	27	28	29	30
Abies balsam		1	1	(100)	(95)		110	75		
Acer rubrum	(15)				(20)		125			
A. sacchar.	2	1	3		1	32(22)	(12)	19	(13)	3
A. spicatum							25	22		3
Betula lut.							215			
B. papyrif							(215)			
Carpinus car										
Fagus gran										
Ostrya virg										
Picea glau										
Pinus Bank										
P. resinosa	95	110, 48	45	65	205				75	22
P. Strobus	95(32)	(150, 40)	120	55	(42)	2		110	60	50
Populus bals			3		(75)					
P. grand										75
P. trem										(75)
Prunus pen.										
Quercus ell										
Q. rubra				1						
Tilia amer					1					1
Tsuga can										
Thuja occ										
Ulmus amer										
U. fulva										
Betula serot	2									
Distance	9.5	15.5	21	17.5	12	14	12	15.5	14.5	22

$$\frac{10}{6} \frac{5}{5}$$

POINT RECORD TREES

NORTHERN PINE-HARDWOODS

Stand No. 1096

STATION NO.	31	32	33	34	35	36	37	38	39	40
<i>Abies balsam</i>		1		1				(13)	1	
<i>Acer rubrum</i>		(110) (14) 3	(30) (120) 1	(85) (17)	2	2	1	1	(13) (17)	4
<i>A. sacchar.</i>	3		3	1	1	2	1		1	
<i>A. spicatum</i>										
<i>Betula lut.</i>					1					
<i>B. papyrif</i>										
<i>Carpinus car</i>									2	
<i>Fagus gran</i>										
<i>Ostrya virg</i>										
<i>Picea glau</i>		55		1		160			130	70
<i>Pinus Bank</i>										
<i>P. resinosa</i>	(136) (95) (55)						(150)	32		(125)
<i>P. Strobus</i>			65	160	(225) 530	(70) (85)	22 460 (160)	(25)		
<i>Populus bals</i>										
<i>P. grand</i>										(45)
<i>P. trem</i>									(22)	
<i>Prunus pen.</i>										
<i>Quercus ell</i>										
<i>Q. rubra</i>			16					15		
<i>Tilia amer</i>										
<i>Tsuga can</i>		(21)		(43)	130 (85)	43				
<i>Thuja occ</i>										
<i>Ulmus amer</i>										
<i>U. fulva</i>										
<i>Prunus serotina</i>	1						1	1		
<i>Frax. nigra</i>		1							1	35
<i>Frax. am</i>				1						
Distance	18	13	16.5	16.5	22.5	8.5	20	16	19	12.5

$$\frac{105}{64}$$

red oak

3096

16

15

31 ①

31 *

Fray

nigra

3096

35

35 (.)

35 *

prop bals.

3096

8 20

8 20 *

Portner
3096

22

22 *

Pop grand

3096

75

45

120 *

white
birch
3096

215

215 *

distances

3096

1	50
1	40
1	80
1	10
1	20
1	70
2	00
1	30
	90
2	40
1	90
1	50
2	90
1	95
2	80
1	80
1	70
	95
1	20
1	45
	95
1	55
2	10
1	75
1	20
1	40
1	55
1	45
2	20
1	80
1	30
1	65
1	65
2	25
	85
2	00
1	60
1	90
1	25
6	385 *

red pine

3096

1	70	✓
1	55	✓
	75	
1	50	✓
2	40	✓
	70	
1	00	✓
1	70	✓
2	05	✓
	95	✓
1	10	✓
	48	
	45	
	65	
2	05	✓
	85	✓
	22	
1	36	✓
1	90	✓
	32	
2	368	○
1	30	✓
2	00	✓
	30	
2	40	✓
	75	
	40	
	50	
1	60	✓
2	00	✓
	70	
3	10	✓
1	50	✓
	40	
1	10	✓
1	40	✓
1	10	✓
	95	✓
	55	
1	50	✓
1	25	✓
4	848	*

white
spruce
3096

45

40

55

1 60 —

1 30 —

70

5 00 ①

38

5 38 *

Tilia

3096

17

17 *

hemlock

3096

1 30 —

43

1 73 (.)

22

21

43

85 —

3 44 *

balcon

3096

	12	
1	20	—
	65	
	95	—
1	10	—
	95	—
4	97	○
	29	
1	00	—
	20	
	13	
6	59	*

Sugar
maple
3096

33
32
17
1 35—
32
25
19
2 93 ①
12
18
24
12
20
28
22
12
13
~~454~~ *

22—

476

red maple

3096

	26	
1	10	—
	85	—
	13	
1	25	—
3	59	()
	20	
	13	
	15	
	12	
	14	
1	20	—
	30	
	17	
	17	
6	17	*

white
pine

3096

	29	
	75	
2	15	-
	45	
2	00	-
1	05	-
	37	
1	05	-
1	20	-
	55	
1	30	-
3	20	-
	28	
1	05	-
1	20	-
1	75	-
6	40	+
3	45	+
6	85	+
3	70	+
1	10	-
	95	-
1	20	-
	55	
	60	
	50	
	65	
1	60	-
5	30	+
	22	
4	60	+
5	6	310
1	40	-
	70	
	30	
	40	
	85	-
1	40	-
4	50	+
	70	
2	00	-
2	30	-
1	60	-
2	00	-
4	90	+
5	80	+
	95	-
	55	
	32	
2	00	-
1	10	-
	75	
	42	
2	25	-
	70	
	85	-
	60	
	25	
9	5	90

TABULATION FORM

Univ. of Wisconsin
Stand No. 3096

[illegible]

TABULATION FORM

NORTHERN PINE-HARDWOODS

Stand No. 3096

STATION NO.	P.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	7
<i>Cirsium altissimum</i>																						
<i>Claytonia caroliniana</i>																						
<i>Claytonia virginica</i>																						
<i>Clematis verticillaris</i>																						
<i>Clintonia borealis</i>	✓	✓	✓			✓										✓						4 30
<i>Comandra richardsiana</i>																						
<i>Comptonia peregrina</i>																						
<i>Convolvulus spithameus</i>																						
<i>Coptis groenlandica</i>																						
<i>Corallorhiza maculata</i>																						
<i>Corallorhiza striata</i>																						
<i>Corallorhiza trifida</i>																						
<i>Coreopsis palmata</i>																						
<i>Cornus alternifolia</i>	✓																					1
<i>Cornus canadensis</i>	✓																					1
<i>Cornus foemina</i>																						
<i>Cornus rugosa</i>																						
<i>Corydalis</i> sp.																						
<i>Corylus americana</i>																						
<i>Corylus cornuta</i>	✓		✓									✓										2 10
<i>Cryptotaenia canadensis</i>																						
<i>Cynoglossum boreale</i>																						
<i>Cypripedium acaule</i>																						
<i>Cypripedium parviflorum</i>																						
<i>Cypripedium pubescens</i>																						
<i>Cystopteris fragillilis</i>																						
<i>Danthonia spicata</i>																						
<i>Dentaria diphylla</i>																						
<i>Desmodium glutinosum</i>																						
<i>Desmodium nudiflorum</i>																						
<i>Dicentra canadensis</i>																						
<i>Dicentra cucullaria</i>																						
<i>Diervilla lonicera</i>	✓	✓									✓		✓				✓	✓	✓			6 30
<i>Dirca palustris</i>																						
<i>Dryopteris bootii</i>																						
<i>Dryopteris cristata</i>																						
<i>Dryopteris goldiana</i>																						
<i>Dryopteris disjuncta</i>																						
<i>Dryopteris phegopteris</i>	✓																					1
<i>Dryopteris spinulosa</i>	✓																					1
<i>Epifagus virginiana</i>																						
<i>Epigaea repens</i>																						
<i>Equisetum arvense</i>																						
<i>Equisetum hyemale</i>																						
<i>Equisetum sylvaticum</i>	✓																					1
<i>Erigeron philadelphicus</i>																						
<i>Erythronium albidum</i>																						
<i>Erythronium americanum</i>																						
<i>Eupatorium rugosum</i>																						
<i>Festuca obtusa</i>																						
<i>Fragaria virginiana</i>	✓		✓								✓	✓					✓	✓				5 25

TABULATION FORM

NORTHERN PINE-HARDWOODS

Stand No. 3096

STATION NO.	P.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	T
<i>Fragaria vesca</i>																						
<i>Galium aparine</i>																						
<i>Galium boreale</i>																						
<i>Galium circaezans</i>																						
<i>Galium concinnum</i>																						
<i>Galium lanceolatum</i>																						
<i>Galium triflorum</i>																						
<i>Gaultheria hispidula</i>																						
<i>Gaylussacia baccata</i>																						
<i>Geranium maculatum</i>																						
<i>Gerardia pedicularia</i>																						
<i>Geum canadense</i>																						
<i>Geum rivale</i>																						
<i>Gnaphalium obtusifolium</i>																						
<i>Goodyera oblongifolia</i>																						
<i>Goodyera pubescens</i>																						
<i>Goodyera repens</i>																						
<i>Habenaria bracteata</i>																						
<i>Habenaria orbiculata</i>																						
<i>Hackelia virginiana</i>																						
<i>Halenia deflexa</i>																						
<i>Hamamelis virginiana</i>																						
<i>Helianthus strumosus</i>																						
<i>Hepatica acutiloba</i>																						
<i>Hepatica americana</i>																						
<i>Heuchera richardsonii</i>																						
<i>Hieracium canadense</i>																						
<i>Hieracium scabrum</i>																						
<i>Hydrophyllum virginianum</i>																						
<i>Hystrix patula</i>																						
<i>Ilex verticillata</i>																						
<i>Impatiens biflora</i> sp.																						
<i>Impatiens pallida</i>																						
<i>Isopyrum bitermum</i>																						
<i>Krigia biflora</i>																						
<i>Lactuca canadensis</i>																						
<i>Laportea canadensis</i>																						
<i>Lathyrus ochroleucus</i>																						
<i>Lathyrus venosus</i>																						
<i>Ledum groenlandicum</i>																						
<i>Lilium michiganense</i>																						
<i>Linnaea borealis</i>																						
<i>Lithospermum canescens</i>																						
<i>Lobelia inflata</i>																						
<i>Lonicera canadensis</i>																						
<i>Lonicera hirsuta</i>																						
<i>Lonicera oblongifolia</i>																						
<i>Lonicera prolifera</i>																						
<i>Lupinus perennis</i>																						
<i>Luzula acuminata</i>																						
<i>Luzula multiflora</i>																						

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[illegible]

TABULATION FORM

NORTHERN PINE-HARDWOODS

Stand No. 3096

STATION NO.	P.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	T
<i>Trientalis borealis</i>	✓		✓		✓							✓	✓			✓						5
<i>Trillium cernuum</i>	✓																					1
<i>Trillium grandiflorum</i>	✓	✓	✓	✓		✓						✓	✓	✓	✓							7
<i>Uvularia grandiflora</i>																						
<i>Uvularia sessilifolia</i>																						
<i>Vaccinium angustifolium</i>	✓																					7
<i>Vaccinium myrtilloides</i>																						
<i>Veronicastrum virginicum</i>																						
<i>Viburnum acerifolium</i>	✓															✓	✓	✓				3
<i>Viburnum rafinesquianum</i>																						
<i>Viburnum lentago</i> <i>aff. ne</i>	✓																					1
<i>Viola adunca</i> <i>sp.</i>	✓																		✓			1
<i>Viola blanda</i>																						
<i>Viola canadensis</i>																						
<i>Viola conspersa</i>	✓																					1
<i>Viola cucullata</i>	✓																					1
<i>Viola pennsylvanica</i>																						
<i>Viola incognita</i>																						
<i>Viola pallens</i>																						
<i>Viola pubescens</i>	✓																					1
<i>Viola renifolia</i>																						
<i>Vitis aestivalis</i>																						
<i>Vitis riparia</i>																						
<i>Waldsteinia fragarioides</i>																						
<i>Xanthoxylum americanum</i>																						
<i>Zizia aurea</i>																						
Additional species:																						
✓ <i>Steironema ciliata</i>	✓																					2
- <i>Amelanchier</i>	✓												✓	✓								2
- <i>Poa</i> <i>sp.</i>	✓																	✓				1

212

335

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HERB FREQUENCY

NORTHERN PINE-HARDWOODS

Stand No. 309
Quadrat No. 1

Actaea pachypoda	Fragaria virginiana	Potentilla simplex
Actaea rubra	Galium lanceolatum	Prenanthes -alba
Adiantum pedatum	Galium triflorum	✓ Pteridium aquilinum
Allium tricoccum	Gaultheria procumbens	Pyrola elliptica
✓ Anemone quinquefolia	Gaylussacia baccata	Pyrola rotundifolia
Aquilegia canadensis	Geranium maculatum	Pyrola secunda
Aralia nudicaulis	Geum canadense	Ranunculus recurvatus
Aralia racemosa	Gnaphalium obtusifolium	Rhus radicans
Arisaema atrorubens	Helianthemum sp.	Ribes americanum
Aster macrophyllus	Helianthus strumosus	Rosa sp.
Aster sagittifolius	Hepatica acutiloba	Rubus parviflorus
Athyrium angustum	Hepatica americana	Rubus (blackberry)
Botrychium virginianum	Impatiens biflora	Rubus (dewberry)
Brachyelytrum erectum	Linnaea borealis	Sambucus pubens
Carex albursina	Lonicera oblongifolia	Sanguinaria canadensis
Caulophyllum thalictroides	Lupinus perennis	Sanicula gregaria
Chimaphila umbellata	Lycopodium annotinum	Smilacina racemosa
Circaea alpina	Lycopodium complanatum	Smilacina stellata
Circaea latifolia	Lycopodium lucidulum	✓ Smilax ecirrhata
✓ Clintonia borealis	Lycopodium obscurum	Solidago ulmifolia
Coptis trifolia	Lysimachia quadrifolia	Streptopus roseus
Corallorrhiza maculata	✓ Maianthemum canadense	Taxus canadensis
Cornus alternifolia	Mitchella repens	Thalictrum dioicum
Cornus canadensis	Mitella diphylla	Trientalis borealis
Cornus rugosa	Mitella nuda	Trillium grandiflorum
Corylus americana	Monotropa uniflora	Uvularia grandiflora
Corylus cornuta	Myrica asplenifolia	Uvularia sessilifolia
Cypripedium acaule	Onoclea sensibilis	Vaccinium angustifolium
✓ Diervilla lonicera	Oryzopsis asperifolia	Vaccinium pennsylvanicum
Dirca palustris	Osmorhiza claytoni	Viburnum acerifolium
Dryopteris linnaeana	Oxalis montana	Viola canadensis
Dryopteris phegopteris	Phryma leptostachya	Viola cucullata
Dryopteris spinulosa	Polygala pauciflora	Viola pallens
Epifagus virginiana	Polygonatum commutatum	Viola pubescens
Epigaea repens	Polygonatum pubescens	Waldsteinia fragarioides

HERB FREQUENCY

NORTHERN PINE-HARDWOODS

Stand No. 3096
Quadrat No. 2

Actaea pachypoda
Actaea rubra
Adiantum pedatum
Allium tricoccum
~~*Anemone quinquefolia*~~
Aquilegia canadensis
Aralia nudicaulis
Aralia racemosa
~~*Arisaema atrorubens*~~
~~*Aster macrophyllus*~~
~~*Aster sagittifolius*~~
Athyrium angustum
Botrychium virginianum
Brachyelytrum erectum
Carex albursina
Caulophyllum thalictroides
Chimaphila umbellata
Circaea alpina
Circaea latifolia
~~*Clintonia borealis*~~
Coptis trifolia
Corallorrhiza maculata
Cornus alternifolia
Cornus canadensis
Cornus rugosa
Corylus americana
~~*Corylus cornuta*~~
Cypripedium acaule
Diervilla lonicera
Dirca palustris
Dryopteris linnaeana
Dryopteris phegopteris
Dryopteris spinulosa
Epifagus virginiana
Epigaea repens

~~*Fragaria virginiana*~~
Galium lanceolatum
Galium triflorum
Gaultheria procumbens
Gaylussacia baccata
Geranium maculatum
Geum canadense
Gnaphalium obtusifolium
Helianthemum sp.
Helianthus strumosus
Hepatica acutiloba
Hepatica americana
Impatiens biflora
Linnaea borealis
Lonicera oblongifolia
Lupinus perennis
Lycopodium annotinum
Lycopodium complanatum
Lycopodium lucidulum
Lycopodium obscurum
Lysimachia quadrifolia
Maianthemum canadense
Mitchella repens
Mitella diphylla
Mitella nuda
Monotropa uniflora
Myrica asplenifolia
Onoclea sensibilis
Oryzopsis asperifolia
Osmorhiza claytoni
Oxalis montana
Phryma leptostachya
Polygala pauciflora
Polygonatum commutatum
Polygonatum pubescens

Potentilla simplex
Prenanthes alba
Pteridium aquilinum
Pyrola elliptica
Pyrola rotundifolia
Pyrola secunda
Ranunculus recurvatus
Rhus radicans
Ribes americanum
Rosa sp.
Rubus parviflorus
Rubus (blackberry)
Rubus (dewberry)
Sambucus pubens
Sanguinaria canadensis
Sanicula gregaria
Smilacina racemosa
Smilacina stellata
Smilax ecirrhata
Solidago ulmifolia
Streptopus roseus
Taxus canadensis
Thalictrum dioicum
Trientalis borealis
~~*Trillium grandiflorum*~~
Uvularia grandiflora
Uvularia sessilifolia
Vaccinium angustifolium
Vaccinium pennsylvanicum
Viburnum acerifolium
Viola canadensis
Viola cucullata
Viola pallens
Viola pubescens
Waldsteinia fragarioides

HERB FREQUENCY

NORTHERN PINE-HARDWOODS

Stand No. 30996
Quadrat No. 3

<i>Actaea pachypoda</i>	<i>Fragaria virginiana</i>	<i>Potentilla simplex</i>
<i>Actaea rubra</i>	<i>Galium lanceolatum</i>	<i>Prenanthes alba</i>
<i>Adiantum pedatum</i>	<i>Galium triflorum</i>	<i>Pteridium aquilinum</i>
<i>Allium tricoccum</i>	<i>Gaultheria procumbens</i>	<i>Pyrola elliptica</i>
<i>Anemone quinquefolia</i>	<i>Gaylussacia baccata</i>	<i>Pyrola rotundifolia</i>
<i>Aquilegia canadensis</i>	<i>Geranium maculatum</i>	<i>Pyrola secunda</i>
<i>Aralia nudicaulis</i>	<i>Geum canadense</i>	<i>Ranunculus recurvatus</i>
<i>Aralia racemosa</i>	<i>Gnaphalium obtusifolium</i>	<i>Rhus radicans</i>
<i>Arisaema atrorubens</i>	<i>Helianthemum sp.</i>	<i>Ribes americanum</i>
<i>Aster macrophyllus</i>	<i>Helianthus strumosus</i>	<i>Rosa sp.</i>
<i>Aster sagittifolius</i>	<i>Hepatica acutiloba</i>	<i>Rubus parviflorus</i>
<i>Athyrium angustum</i>	<i>Hepatica americana</i>	<i>Rubus (blackberry)</i>
<i>Botrychium virginianum</i>	<i>Impatiens biflora</i>	<i>Rubus (dewberry)</i>
<i>Brachyelytrum erectum</i>	<i>Linnaea borealis</i>	<i>Sambucus pubens</i>
<i>Carex albursina</i>	<i>Lonicera oblongifolia</i>	<i>Sanguinaria canadensis</i>
<i>Caulophyllum thalictroides</i>	<i>Lupinus perennis</i>	<i>Sanicula gregaria</i>
<i>Chimaphila umbellata</i>	<i>Lycopodium annotinum</i>	<i>Smilacina racemosa</i>
<i>Circaea alpina</i>	<i>Lycopodium complanatum</i>	<i>Smilacina stellata</i>
<i>Circaea latifolia</i>	<i>Lycopodium lucidulum</i>	<i>Smilax ecirrhata</i>
<i>Clintonia borealis</i>	<i>Lycopodium obscurum</i>	<i>Solidago ulmifolia</i>
<i>Coptis trifolia</i>	<i>Lysimachia quadrifolia</i>	<i>Streptopus roseus</i>
<i>Corallorrhiza maculata</i>	<i>Maianthemum canadense</i>	<i>Taxus canadensis</i>
<i>Cornus alternifolia</i>	<i>Mitchella repens</i>	<i>Thalictrum dioicum</i>
<i>Cornus canadensis</i>	<i>Mitella diphylla</i>	<i>Trientalis borealis</i>
<i>Cornus rugosa</i>	<i>Mitella nuda</i>	<i>Trillium grandiflorum</i>
<i>Corylus americana</i>	<i>Monotropa uniflora</i>	<i>Uvularia grandiflora</i>
<i>Corylus cornuta</i>	<i>Myrica asplenifolia</i>	<i>Uvularia sessilifolia</i>
<i>Cypripedium acaule</i>	<i>Onoclea sensibilis</i>	<i>Vaccinium angustifolium</i>
<i>Diervilla lonicera</i>	<i>Oryzopsis asperifolia</i>	<i>Vaccinium pennsylvanicum</i>
<i>Dirca palustris</i>	<i>Osmorhiza claytoni</i>	<i>Viburnum acerifolium</i>
<i>Dryopteris linnaeana</i>	<i>Oxalis montana</i>	<i>Viola canadensis</i>
<i>Dryopteris phegopteris</i>	<i>Phryma leptostachya</i>	<i>Viola cucullata</i>
<i>Dryopteris spinulosa</i>	<i>Polygala pauciflora</i>	<i>Viola pallens</i>
<i>Epifagus virginiana</i>	<i>Polygonatum commutatum</i>	<i>Viola pubescens</i>
<i>Epigaea repens</i>	<i>Polygonatum pubescens</i>	<i>Waldsteinia fragarioides</i>

HERB FREQUENCY

NORTHERN PINE-HARDWOODS

Stand No. 3096
Quadrat No. 4

Actaea pachypoda
Actaea rubra
Adiantum pedatum
Allium tricoccum
~~*Anemone*~~ *quinquefolia*
Aquilegia canadensis
Aralia nudicaulis
Aralia racemosa
Arisaema atrorubens
Aster macrophyllus
Aster sagittifolius
Athyrium angustum
Botrychium virginianum
Brachyelytrum erectum
Carex albursina
Caulophyllum thalictroides
Chimaphila umbellata
Circaea alpina
Circaea latifolia
Clintonia borealis
Coptis trifolia
Corallorrhiza maculata
Cornus alternifolia
Cornus canadensis
Cornus rugosa
Corylus americana
Corylus cornuta
Cypripedium acaule
Diervilla lonicera
Dirca palustris
Dryopteris linnaeana
Dryopteris phegopteris
Dryopteris spinulosa
Epifagus virginiana
Epigaea repens

Fragaria virginiana
Galium lanceolatum
Galium triflorum
Gaultheria procumbens
Gaylussacia baccata
Geranium maculatum
Geum canadense
Gnaphalium obtusifolium
Helianthemum sp.
Helianthus strumosus
Hepatica acutiloba
Hepatica americana
Impatiens biflora
Linnaea borealis
Lonicera oblongifolia
Lupinus perennis
Lycopodium annotinum
Lycopodium complanatum
Lycopodium lucidulum
Lycopodium obscurum
Lysimachia quadrifolia
~~*Maianthemum*~~ *canadense*
Mitchella repens
Mitella diphylla
Mitella nuda
Monotropa uniflora
Myrica asplenifolia
Onoclea sensibilis
Oryzopsis asperifolia
Osmorhiza claytoni
Oxalis montana
Phryma leptostachya
Polygala pauciflora
Polygonatum commutatum
Polygonatum pubescens

Potentilla simplex
Prenanthes alba
Pteridium aquilinum
Pyrola elliptica
Pyrola rotundifolia
Pyrola secunda
Ranunculus recurvatus
Rhus radicans
Ribes americanum
Rosa sp.
Rubus parviflorus
Rubus (blackberry)
Rubus (dewberry)
Sambucus pubens
Sanguinaria canadensis
Sanicula gregaria
Smilacina racemosa
Smilacina stellata
Smilax ecirrhata
Solidago ulmifolia
Streptopus roseus
Taxus canadensis
Thalictrum dioicum
Trientalis borealis
Trillium grandiflorum
Uvularia grandiflora
Uvularia sessilifolia
Vaccinium angustifolium
Vaccinium pennsylvanicum
Viburnum acerifolium
Viola canadensis
Viola cucullata
Viola pallens
Viola pubescens
Waldsteinia fragarioides

HERB FREQUENCY

NORTHERN PINE-HARDWOODS

Stand No. 309
Quadrat No. 5

Actaea pachypoda
Actaea rubra
Adiantum pedatum
Allium tricoccum
Anemone quinquefolia
Aquilegia canadensis
Aralia nudicaulis
Aralia racemosa
Arisaema atrorubens
Aster macrophyllus
Aster sagittifolius
Athyrium angustum
Botrychium virginianum
Brachyelytrum erectum
Carex albursina
Caulophyllum thalictroides
Chimaphila umbellata
Circaea alpina
Circaea latifolia
Clintonia borealis
Coptis trifolia
Corallorrhiza maculata
Cornus alternifolia
Cornus canadensis
Cornus rugosa
Corylus americana
Corylus cornuta
Cypripedium acaule
Diervilla lonicera
Dirca palustris
Dryopteris linnaeana
Dryopteris phegopteris
Dryopteris spinulosa
Epifagus virginiana
Epigaea repens

Fragaria virginiana
Galium lanceolatum
Galium triflorum
Gaultheria procumbens
Gaylussacia baccata
Geranium maculatum
Geum canadense
Gnaphalium obtusifolium
Helianthemum sp.
Helianthus strumosus
Hepatica acutiloba
Hepatica americana
Impatiens biflora
Linnaea borealis
Lonicera oblongifolia
Lupinus perennis
Lycopodium annotinum
Lycopodium complanatum
Lycopodium lucidulum
Lycopodium obscurum
Lysimachia quadrifolia
Maianthemum canadense
Mitchella repens
Mitella diphylla
Mitella nuda
Monotropa uniflora
Myrica asplenifolia
Onoclea sensibilis
Oryzopsis asperifolia
Osmorhiza claytoni
Oxalis montana
Phryma leptostachya
Polygala pauciflora
Polygonatum commutatum
Polygonatum pubescens

Potentilla simplex
Prenanthes alba
Pteridium aquilinum
Pyrola elliptica
Pyrola rotundifolia
Pyrola secunda
Ranunculus recurvatus
Rhus radicans
Ribes americanum
Rosa sp.
Rubus parviflorus
Rubus (blackberry)
Rubus (dewberry)
Sambucus pubens
Sanguinaria canadensis
Sanicula gregaria
Smilacina racemosa
Smilacina stellata
Smilax ecirrhata
Solidago ulmifolia
Streptopus roseus
Taxus canadensis
Thalictrum dioicum
Trientalis borealis
Trillium grandiflorum
Uvularia grandiflora
Uvularia sessilifolia
Vaccinium angustifolium
Vaccinium pennsylvanicum
Viburnum acerifolium
Viola canadensis
Viola cucullata
Viola pallens
Viola pubescens
Waldsteinia fragarioides

HERB FREQUENCY

NORTHERN PINE-HARDWOODS

Stand No. 3096
Quadrat No. 6

Actaea pachypoda
Actaea rubra
Adiantum pedatum
Allium tricoccum
~~*Anemone quinquefolia*~~
Aquilegia canadensis
~~*Aralia nudicaulis*~~
Aralia racemosa
Arisaema atrorubens
~~*Aster macrophyllus*~~
~~*Aster sagittifolius*~~
Athyrium angustum
Botrychium virginianum
Brachyelytrum erectum
Carex albursina
Caulophyllum thalictroides
Chimaphila umbellata
Circaea alpina
Circaea latifolia
Clintonia borealis
Coptis trifolia
Corallorrhiza maculata
Cornus alternifolia
Cornus canadensis
Cornus rugosa
Corylus americana
Corylus cornuta
Cypripedium acaule
Diervilla lonicera
Dirca palustris
Dryopteris linnaeana
Dryopteris phegopteris
Dryopteris spinulosa
Epifagus virginiana
Epigaea repens

Fragaria virginiana
Galium lanceolatum
Galium triflorum
Gaultheria procumbens
Gaylussacia baccata
Geranium maculatum
Geum canadense
Gnaphalium obtusifolium
Helianthemum sp.
Helianthus strumosus
Hepatica acutiloba
~~*Hepatica americana*~~
Impatiens biflora
Linnaea borealis
Lonicera oblongifolia
Lupinus perennis
Lycopodium annotinum
Lycopodium complanatum
Lycopodium lucidulum
Lycopodium obscurum
Lysimachia quadrifolia
~~*Maianthemum canadense*~~
~~*Mitchella repens*~~
Mitella diphylla
Mitella nuda
Monotropa uniflora
Myrica asplenifolia
Onoclea sensibilis
~~*Oryzopsis asperifolia*~~
Osmorhiza claytoni
Oxalis montana
Phryma leptostachya
Polygala pauciflora
Polygonatum commutatum
Polygonatum pubescens

Potentilla simplex
Prenanthes alba
Pteridium aquilinum
~~*Pyrola elliptica*~~
Pyrola rotundifolia
Pyrola secunda
Ranunculus recurvatus
Rhus radicans
Ribes americanum
Rosa sp.
Rubus parviflorus
Rubus (blackberry)
Rubus (dewberry)
Sambucus pubens
Sanguinaria canadensis
Sanicula gregaria
Smilacina racemosa
Smilacina stellata
Smilax ecirrhata
Solidago ulmifolia
Streptopus roseus
Taxus canadensis
Thalictrum dioicum
Trientalis borealis
~~*Trillium grandiflorum*~~
Uvularia grandiflora
Uvularia sessilifolia
Vaccinium angustifolium
Vaccinium pennsylvanicum
Viburnum acerifolium
Viola canadensis
Viola cucullata
Viola pallens
Viola pubescens
Waldsteinia fragarioides

HERB FREQUENCY

NORTHERN PINE-HARDWOODS

Stand No. 3096
Quadrat No. 7

Actaea pachypoda
Actaea rubra
Adiantum pedatum
Allium tricoccum
Anemone quinquefolia
Aquilegia canadensis
Aralia nudicaulis
Aralia racemosa
Arisaema atrorubens
Aster macrophyllus
Aster sagittifolius
Athyrium angustum
Botrychium virginianum
Brachyelytrum erectum
Carex albursina
Caulophyllum thalictroides
Chimaphila umbellata
Circaea alpina
Circaea latifolia
Clintonia borealis
Coptis trifolia
Corallorrhiza maculata
Cornus alternifolia
Cornus canadensis
Cornus rugosa
Corylus americana
Corylus cornuta
Cypripedium acaule
Diervilla lonicera
Dirca palustris
Dryopteris linnaeana
Dryopteris phegopteris
Dryopteris spinulosa
Epifagus virginiana
Epigaea repens

Fragaria virginiana
Galium lanceolatum
Galium triflorum
Gaultheria procumbens
Gaylussacia baccata
Geranium maculatum
Geum canadense
Gnaphalium obtusifolium
Helianthemum sp.
Helianthus strumosus
Hepatica acutiloba
Hepatica americana
Impatiens biflora
Linnaea borealis
Lonicera oblongifolia
Lupinus perennis
Lycopodium annotinum
Lycopodium complanatum
Lycopodium lucidulum
Lycopodium obscurum
Lysimachia quadrifolia
Maianthemum canadense
Mitchella repens
Mitella diphylla
Mitella nuda
Monotropa uniflora
Myrica asplenifolia
Onoclea sensibilis
Oryzopsis asperifolia
Osmorhiza claytoni
Oxalis montana
Phryma leptostachya
Polygala pauciflora
Polygonatum commutatum
Polygonatum pubescens

Potentilla simplex
Prenanthes alba
Pteridium aquilinum
Pyrola elliptica
Pyrola rotundifolia
Pyrola secunda
Ranunculus recurvatus
Rhus radicans
Ribes americanum
Rosa sp.
Rubus parviflorus
Rubus (blackberry)
Rubus (dewberry)
Sambucus pubens
Sanguinaria canadensis
Sanicula gregaria
Smilacina racemosa
Smilacina stellata
Smilax ecirrhata
Solidago ulmifolia
Streptopus roseus
Taxus canadensis
Thalictrum dioicum
Trientalis borealis
Trillium grandiflorum
Uvularia grandiflora
Uvularia sessilifolia
Vaccinium angustifolium
Vaccinium pennsylvanicum
Viburnum acerifolium
Viola canadensis
Viola cucullata
Viola pallens
Viola pubescens
Waldsteinia fragarioides

Lonicera hirsuta

HERB FREQUENCY

NORTHERN PINE-HARDWOODS

Stand No.
Quadrat No.3096
8

Actaea pachypoda
Actaea rubra
Adiantum pedatum
Allium tricoccum
Anemone quinquefolia
Aquilegia canadensis
Aralia nudicaulis
Aralia racemosa
Arisaema atrorubens
Aster macrophyllus
Aster sagittifolius
Athyrium angustum
Botrychium virginianum
Brachyelytrum erectum
Carex albursina
Caulophyllum thalictroides
Chimaphila umbellata
Circaea alpina
Circaea latifolia
Clintonia borealis
Coptis trifolia
Corallorrhiza maculata
Cornus alternifolia
Cornus canadensis
Cornus rugosa
Corylus americana
Corylus cornuta
Cypripedium acaule
Diervilla lonicera
Dirca palustris
Dryopteris linnaeana
Dryopteris phegopteris
Dryopteris spinulosa
Epifagus virginiana
Epigaea repens

Fragaria virginiana
Galium lanceolatum
Galium triflorum
Gaultheria procumbens
Gaylussacia baccata
Geranium maculatum
Geum canadense
Gnaphalium obtusifolium
Helianthemum sp.
Helianthus strumosus
Hepatica acutiloba
Hepatica americana
Impatiens biflora
Linnaea borealis
Lonicera oblongifolia
Lupinus perennis
Lycopodium annotinum
Lycopodium complanatum
Lycopodium lucidulum
Lycopodium obscurum
Lysimachia quadrifolia
~~*Maianthemum canadense*~~
Mitchella repens
Mitella diphylla
Mitella nuda
Monotropa uniflora
Myrica asplenifolia
Onoclea sensibilis
Oryzopsis asperifolia
Osmorhiza claytoni
Oxalis montana
Phryma leptostachya
Polygala pauciflora
Polygonatum commutatum
Polygonatum pubescens

Potentilla simplex
Prenanthes alba
Pteridium aquilinum
Pyrola elliptica
Pyrola rotundifolia
Pyrola secunda
Ranunculus recurvatus
Rhus radicans
Ribes americanum
Rosa sp.
Rubus parviflorus
Rubus (blackberry)
Rubus (dewberry)
Sambucus pubens
Sanguinaria canadensis
Sanicula gregaria
Smilacina racemosa
Smilacina stellata
Smilax ecirrhata
Solidago ulmifolia
Streptopus roseus
Taxus canadensis
Thalictrum dioicum
Trientalis borealis
Trillium grandiflorum
Uvularia grandiflora
Uvularia sessilifolia
Vaccinium angustifolium
Vaccinium pennsylvanicum
Viburnum acerifolium
Viola canadensis
Viola cucullata
Viola pallens
Viola pubescens
Waldsteinia fragarioides

Parthenocissus

HERB FREQUENCY

NORTHERN PINE-HARDWOODS

Stand No. 3096
Quadrat No. 9

~~Actaea pachypoda~~
 Actaea rubra
 Adiantum pedatum
 Allium tricoccum
~~Anemone quinquefolia~~
 Aquilegia canadensis
 Aralia nudicaulis
 Aralia racemosa
 Arisaema atrorubens
~~Aster macrophyllus~~
 Aster sagittifolius
 Athyrium angustum
 Botrychium virginianum
 Brachyelytrum erectum
 Carex albursina
 Caulophyllum thalictroides
 Chimaphila umbellata
 Circaea alpina
 Circaea latifolia
 Clintonia borealis
 Coptis trifolia
 Corallorrhiza maculata
 Cornus alternifolia
 Cornus canadensis
 Cornus rugosa
 Corylus americana
 Corylus cornuta
 Cypridium acaule
 Diervilla lonicera
 Dirca palustris
 Dryopteris linnaeana
 Dryopteris phegopteris
 Dryopteris spinulosa
 Epifagus virginiana
 Epigaea repens

~~Fragaria virginiana~~
 Galium lanceolatum
 Galium triflorum
 Gaultheria procumbens
 Gaylussacia baccata
 Geranium maculatum
 Geum canadense
 Gnaphalium obtusifolium
 Helianthemum sp.
 Helianthus strumosus
 Hepatica acutiloba
 Hepatica americana
 Impatiens biflora
 Linnaea borealis
~~Lonicera oblongifolia~~
 Lupinus perennis
 Lycopodium annotinum
 Lycopodium complanatum
 Lycopodium lucidulum
 Lycopodium obscurum
 Lysimachia quadrifolia
 Maianthemum canadense
~~Mitchella repens~~
 Mitella diphylla
 Mitella nuda
 Monotropa uniflora
 Myrica asplenifolia
 Onoclea sensibilis
 Oryzopsis asperifolia
 Osmorhiza claytoni
 Oxalis montana
 Phryma leptostachya
 Polygala pauciflora
 Polygonatum commutatum
 Polygonatum pubescens

Potentilla simplex
 Prenanthes alba
 Pteridium aquilinum
 Pyrola elliptica
 Pyrola rotundifolia
 Pyrola secunda
 Ranunculus recurvatus
 Rhus radicans
 Ribes americanum
 Rosa sp.
 Rubus parviflorus
 Rubus (blackberry)
~~Rubus (dewberry)~~
 Sambucus pubens
 Sanguinaria canadensis
 Sanicula gregaria
 Smilacina racemosa
 Smilacina stellata
 Smilax ecirrhata
 Solidago ulmifolia
~~Streptopus roseus~~
 Taxus canadensis
 Thalictrum dioicum
 Trientalis borealis
 Trillium grandiflorum
 Uvularia grandiflora
 Uvularia sessilifolia
 Vaccinium angustifolium
 Vaccinium pennsylvanicum
 Viburnum acerifolium
 Viola canadensis
 Viola cucullata
 Viola pallens
 Viola pubescens
 Waldsteinia fragarioides

HERB FREQUENCY

NORTHERN PINE-HARDWOODS

Stand No. 3098
Quadrat No. 10

Actaea pachypoda
Actaea rubra
Adiantum pedatum
Allium tricoccum
~~*Anemone quinquefolia*~~
Aquilegia canadensis
~~*Aralia nudicaulis*~~
Aralia racemosa
~~*Arisaema atrorubens*~~
~~*Aster macrophyllus*~~
Aster sagittifolius
Athyrium angustum
Botrychium virginianum
Brachyelytrum erectum
Carex albursina
Caulophyllum thalictroides
Chimaphila umbellata
Circaea alpina
Circaea latifolia
Clintonia borealis
Coptis trifolia
Corallorrhiza maculata
Cornus alternifolia
Cornus canadensis
Cornus rugosa
Corylus americana
Corylus cornuta
Cypripedium acaule
~~*Diervilla lonicera*~~
Dirca palustris
Dryopteris linnaeana
Dryopteris phegopteris
Dryopteris spinulosa
Epifagus virginiana
Epigaea repens

~~*Fragaria virginiana*~~
Galium lanceolatum
Galium triflorum
Gaultheria procumbens
Gaylussacia baccata
Geranium maculatum
Geum canadense
Gnaphalium obtusifolium
Helianthemum sp.
Helianthus strumosus
~~*Hepatica acutiloba*~~
Hepatica americana
Impatiens biflora
Linnaea borealis
Lonicera oblongifolia
Lupinus perennis
Lycopodium annotinum
Lycopodium complanatum
Lycopodium lucidulum
Lycopodium obscurum
Lysimachia quadrifolia
~~*Maianthemum canadense*~~
~~*Mitchella repens*~~
Mitella diphylla
Mitella nuda
Monotropa uniflora
Myrica asplenifolia
Onoclea sensibilis
~~*Oryzopsis asperifolia*~~
Osmorhiza claytoni
Oxalis montana
Phryma leptostachya
Polygala pauciflora
Polygonatum commutatum
Polygonatum pubescens

Potentilla simplex
Prenanthes alba
Pteridium aquilinum
Pyrola elliptica
Pyrola rotundifolia
Pyrola secunda
Ranunculus recurvatus
Rhus radicans
Ribes americanum
Rosa sp.
Rubus parviflorus
Rubus (blackberry)
Rubus (dewberry)
Sambucus pubens
Sanguinaria canadensis
Sanicula gregaria
Smilacina racemosa
Smilacina stellata
Smilax ecirrhata
Solidago ulmifolia
Streptopus roseus
Taxus canadensis
Thalictrum dioicum
Trientalis borealis
Trillium grandiflorum
Uvularia grandiflora
Uvularia sessilifolia
Vaccinium angustifolium
Vaccinium pennsylvanicum
Viburnum acerifolium
Viola canadensis
Viola cucullata
Viola pallens
Viola pubescens
Waldsteinia fragarioides

HERB FREQUENCY

NORTHERN PINE-HARDWOODS

Stand No. 3096
Quadrat No.

Actaea pachypoda	Fragaria virginiana	Potentilla simplex
Actaea rubra	Galium lanceolatum	Prenanthes alba
Adiantum pedatum	✓ Galium triflorum	Pteridium aquilinum
Allium tricoccum	Gaultheria procumbens	Pyrola elliptica
✓ Anemone quinquefolia	Gaylussacia baccata	✓ Pyrola rotundifolia
Aquilegia canadensis	Geranium maculatum	Pyrola secunda
Aralia nudicaulis	Geum canadense	Ranunculus recurvatus
Aralia racemosa	Gnaphalium obtusifolium	Rhus radicans
Arisaema atrorubens	Helianthemum sp.	Ribes americanum
✓ Aster macrophyllus	Helianthus strumosus	Rosa sp.
Aster sagittifolius	Hepatica acutiloba	Rubus parviflorus
Athyrium angustum	✓ Hepatica americana	Rubus (blackberry)
Botrychium virginianum	Impatiens biflora	Rubus (dewberry)
Brachyelytrum erectum	Linnaea borealis	Sambucus pubens
Carex albursina	Lonicera oblongifolia	Sanguinaria canadensis
Caulophyllum thalictroides	Lupinus perennis	Sanicula gregaria
Chimaphila umbellata	Lycopodium annotinum	Smilacina racemosa
Circaea alpina	Lycopodium complanatum	Smilacina stellata
Circaea latifolia	Lycopodium lucidulum	Smilax ecirrhata
Clintonia borealis	Lycopodium obscurum	Solidago ulmifolia
Coptis trifolia	Lysimachia quadrifolia	Streptopus roseus
Corallorrhiza maculata	✓ Maianthemum canadense	Taxus canadensis
Cornus alternifolia	✓ Mitella repens	Thalictrum dioicum
Cornus canadensis	Mitella diphylla	✓ Trientalis borealis
Cornus rugosa	Mitella nuda	✓ Trillium grandiflorum
Corylus americana	Monotropa uniflora	Uvularia grandiflora
✓ Corylus cornuta	Myrica asplenifolia	Uvularia sessilifolia
Cypripedium acaule	Onoclea sensibilis	Vaccinium angustifolium
Diervilla lonicera	Oryzopsis asperifolia	Vaccinium pennsylvanicum
Dirca palustris	Osmorhiza claytoni	Viburnum acerifolium
Dryopteris linnaeana	Oxalis montana	Viola canadensis
Dryopteris phegopteris	Phryma leptostachya	Viola cucullata
Dryopteris spinulosa	Polygala pauciflora	Viola pallens
Epifagus virginiana	Polygonatum commutatum	Viola pubescens
Epigaea repens	Polygonatum pubescens	Waldsteinia fragarioides

HERB FREQUENCY

NORTHERN PINE-HARDWOODS

Stand No. 3096
Quadrat No. 2

Actaea pachypoda
Actaea rubra
Adiantum pedatum
Allium tricoccum
Anemone quinquefolia
Aquilegia canadensis
Aralia nudicaulis
Aralia racemosa
Arisaema atrorubens
☒ *Aster macrophyllus*
Aster sagittifolius
Athyrium angustum
Botrychium virginianum
Brachyelytrum erectum
Carex albursina
Caulophyllum thalictroides
Chimaphila umbellata
Circaea alpina
Circaea latifolia
Clintonia borealis
Coptis trifolia
Corallorrhiza maculata
Cornus alternifolia
Cornus canadensis
Cornus rugosa
Corylus americana
Corylus cornuta
Cypripedium acaule
Diervilla lonicera
Dirca palustris
Dryopteris linnaeana
Dryopteris phegopteris
Dryopteris spinulosa
Epifagus virginiana
Epigaea repens

Fragaria virginiana
Galium lanceolatum
Galium triflorum
Gaultheria procumbens
Gaylussacia baccata
Geranium maculatum
Geum canadense
Gnaphalium obtusifolium
Helianthemum sp.
Helianthus strumosus
Hepatica acutiloba
Hepatica americana
Impatiens biflora
Linnaea borealis
Lonicera oblongifolia
Lupinus perennis
Lycopodium annotinum
Lycopodium complanatum
Lycopodium lucidulum
☒ *Lycopodium obscurum*
Lysimachia quadrifolia
☒ *Maianthemum canadense*
☒ *Mitchella repens*
Mitella diphylla
Mitella nuda
Monotropa uniflora
Myrica asplenifolia
Onoclea sensibilis
Oryzopsis asperifolia
Osmorhiza claytoni
Oxalis montana
Phryma leptostachya
Polygala pauciflora
Polygonatum commutatum
Polygonatum pubescens

Potentilla simplex
Prenanthes alba
Pteridium aquilinum
Pyrola elliptica
Pyrola rotundifolia
Pyrola secunda
Ranunculus recurvatus
Rhus radicans
Ribes americanum
Rosa sp.
Rubus parviflorus
Rubus (blackberry)
☒ *Rubus (dewberry)*
Sambucus pubens
Sanguinaria canadensis
Sanicula gregaria
Smilacina racemosa
Smilacina stellata
Smilax ecirrhata
Solidago ulmifolia
Streptopus roseus
Taxus canadensis
Thalictrum dioicum
☒ *Trientalis borealis*
☒ *Trillium grandiflorum*
Uvularia grandiflora
Uvularia sessilifolia
Vaccinium angustifolium
Vaccinium pennsylvanicum
Viburnum acerifolium
Viola canadensis
Viola cucullata
Viola pallens
Viola pubescens
Waldsteinia fragarioides

☒ *Hamamelis*
☒ *Smilax hispida*

HERB FREQUENCY

NORTHERN PINE-HARDWOODS

Stand No. 3096

Quadrat No. 3

Actaea pachypoda	Fragaria virginiana	Potentilla simplex
Actaea rubra	Galium lanceolatum	Prenanthes alba
Adiantum pedatum	✓ Galium triflorum	✓ Pteridium aquilinum
Allium tricoccum	Gaultheria procumbens	Pyrola elliptica
✓ Anemone quinquefolia	Gaylussacia baccata	Pyrola rotundifolia
Aquilegia canadensis	Geranium maculatum	Pyrola secunda
Aralia nudicaulis	Geum canadense	Ranunculus recurvatus
Aralia racemosa	Gnaphalium obtusifolium	Rhus radicans
Arisaema atrorubens	Helianthemum sp.	✓ Ribes americanum cynosbati
✓ Aster macrophyllus	Helianthus strumosus	Rosa sp.
Aster sagittifolius	Hepatica acutiloba	Rubus parviflorus
Athyrium angustum	Hepatica americana	Rubus (blackberry)
Botrychium virginianum	Impatiens biflora	Rubus (dewberry)
Brachyelytrum erectum	Linnaea borealis	Sambucus pubens
Carex albursina	Lonicera oblongifolia	Sanguinaria canadensis
Caulophyllum thalictroides	Lupinus perennis	Sanicula gregaria
Chimaphila umbellata	Lycopodium annotinum	Smilacina racemosa
Circaea alpina	Lycopodium complanatum	Smilacina stellata
Circaea latifolia	Lycopodium lucidulum	Smilax ecirrhata
Clintonia borealis	Lycopodium obscurum	Solidago ulmifolia
Coptis trifolia	Lysimachia quadrifolia	Streptopus roseus
Corallorrhiza maculata	✓ Maianthemum canadense	Taxus canadensis
Cornus alternifolia	✓ Mitchella repens	Thalictrum dioicum
Cornus canadensis	Mitella diphylla	Trientalis borealis
Cornus rugosa	Mitella nuda	✓ Trillium grandiflorum
Corylus americana	Monotropa uniflora	Uvularia grandiflora
Corylus cornuta	Myrica asplenifolia	Uvularia sessilifolia
Cypripedium acaule	Onoclea sensibilis	Vaccinium angustifolium
✓ Diervilla lonicera	Oryzopsis asperifolia	Vaccinium pennsylvanicum
Dirca palustris	Osmorhiza claytoni	Viburnum acerifolium
Dryopteris linnaeana	Oxalis montana	Viola canadensis
Dryopteris phegopteris	Phryma leptostachya	Viola cucullata
Dryopteris spinulosa	Polygala pauciflora	Viola pallens
Epifagus virginiana	Polygonatum commutatum	Viola pubescens
Epigaea repens	Polygonatum pubescens	Waldsteinia fragarioides

Amelanchier

HERB FREQUENCY

NORTHERN PINE-HARDWOODS

Stand No.

Quadrat No.

3096

Actaea pachypoda
 Actaea rubra
 Adiantum pedatum
 Allium tricoccum
 ✓ Anemone quinquefolia
 Aquilegia canadensis
 ✓ Aralia nudicaulis
 Aralia racemosa
 Arisaema atrorubens
 Aster macrophyllus
 Aster sagittifolius
 Athyrium angustum
 Botrychium virginianum
 Brachyelytrum erectum
 Carex albursina
 Caulophyllum thalictroides
 Chimaphila umbellata
 Circaea alpina
 Circaea latifolia
 Clintonia borealis
 Coptis trifolia
 Corallorrhiza maculata
 Cornus alternifolia
 Cornus canadensis
 Cornus rugosa
 Corylus americana
 Corylus cornuta
 Cypripedium acaule
 Diervilla lonicera
 Dirca palustris
 Dryopteris linnaeana
 Dryopteris phegopteris
 Dryopteris spinulosa
 Epifagus virginiana
 Epigaea repens

Fragaria virginiana
 Galium lanceolatum
 Galium triflorum
 Gaultheria procumbens
 Gaylussacia baccata
 Geranium maculatum
 Geum canadense
 Gnaphalium obtusifolium
 Helianthemum sp.
 Helianthus strumosus
 Hepatica acutiloba
 ✓ Hepatica americana
 Impatiens biflora
 Linnaea borealis
 Lonicera oblongifolia
 Lupinus perennis
 Lycopodium annotinum
 Lycopodium complanatum
 Lycopodium lucidulum
 Lycopodium obscurum
 Lysimachia quadrifolia
 ✓ Maianthemum canadense
 ✓ Mitchella repens
 Mitella diphylla
 Mitella nuda
 Monotropa uniflora
 Myrica asplenifolia
 Onoclea sensibilis
 ✓ Oryzopsis asperifolia
 Osmorhiza claytoni
 Oxalis montana
 Phryma leptostachya
 Polygala pauciflora
 Polygonatum commutatum
 ✓ Polygonatum pubescens

Potentilla simplex
 Prenanthes alba
 Pteridium aquilinum
 Pyrola elliptica
 Pyrola rotundifolia
 Pyrola secunda
 Ranunculus recurvatus
 Rhus radicans
 Ribes americanum
 Rosa sp.
 Rubus parviflorus
 Rubus (blackberry)
 Rubus (dewberry)
 Sambucus pubens
 Sanguinaria canadensis
 Sanicula gregaria
 Smilacina racemosa
 Smilacina stellata
 Smilax ecirrhata
 Solidago ulmifolia
 Streptopus roseus
 Taxus canadensis
 Thalictrum dioicum
 Trientalis borealis
 ✓ Trillium grandiflorum
 Uvularia grandiflora
 Uvularia sessilifolia
 Vaccinium angustifolium
 Vaccinium pennsylvanicum
 Viburnum acerifolium
 Viola canadensis
 Viola cucullata
 Viola pallens
 Viola pubescens
 Waldsteinia fragarioides

Amelanchier

HERB FREQUENCY

NORTHERN PINE-HARDWOODS

Stand No.

Quadrat No. 5

3096

Actaea pachypoda	Fragaria virginiana	Potentilla simplex
Actaea rubra	Galium lanceolatum	Prenanthes alba
Adiantum pedatum	Galium triflorum	Pteridium aquilinum
Allium tricoccum	Gaultheria procumbens	Pyrola elliptica
✓ Anemone quinquefolia	Gaylussacia baccata	Pyrola rotundifolia
Aquilegia canadensis	Geranium maculatum	Pyrola secunda
Aralia nudicaulis	Geum canadense	Ranunculus recurvatus
Aralia racemosa	Gnaphalium obtusifolium	Rhus radicans
Arisaema atrorubens	Helianthemum sp.	Ribes americanum
Aster macrophyllus	Helianthus strumosus	Rosa sp.
Aster sagittifolius	Hepatica acutiloba	Rubus parviflorus
Athyrium angustum	Hepatica americana	Rubus (blackberry)
Botrychium virginianum	Impatiens biflora	Rubus (dewberry)
Brachyelytrum erectum	Linnaea borealis	Sambucus pubens
Carex albursina	Lonicera oblongifolia	Sanguinaria canadensis
Caulophyllum thalictroides	Lupinus perennis	Sanicula gregaria
Chimaphila umbellata	Lycopodium annotinum	Smilacina racemosa
Circaea alpina	Lycopodium complanatum	Smilacina stellata
Circaea latifolia	Lycopodium lucidulum	Smilax ecirrhata
✓ Clintonia borealis	Lycopodium obscurum	Solidago ulmifolia
Coptis trifolia	Lysimachia quadrifolia	Streptopus roseus
Corallorrhiza maculata	✓ 2 Maianthemum canadense	Taxus canadensis
Cornus alternifolia	✓ Mitchella repens	Thalictrum dioicum
Cornus canadensis	Mitella diphylla	✓ Trientalis borealis
Cornus rugosa	Mitella nuda	Trillium grandiflorum
Corylus americana	Monotropa uniflora	Uvularia grandiflora
Corylus cornuta	Myrica asplenifolia	Uvularia sessilifolia
Cypripedium acaule	Onoclea sensibilis	Vaccinium angustifolium
Diervilla lonicera	Oryzopsis asperifolia	Vaccinium pennsylvanicum
Dirca palustris	Osmorhiza claytoni	✓ Viburnum acerifolium
Dryopteris linnaeana	Oxalis montana	Viola canadensis
Dryopteris phegopteris	Phryma leptostachya	Viola cucullata
Dryopteris spinulosa	Polygala pauciflora	Viola pallens
Epifagus virginiana	Polygonatum commutatum	Viola pubescens
Epigaea repens	✓ Polygonatum pubescens	Waldsteinia fragarioides

✓ Monarda uniflora

HERB FREQUENCY

NORTHERN PINE-HARDWOODS

Stand No. 3096
Quadrat No. 6

Actaea pachypoda	Fragaria virginiana	Potentilla simplex
Actaea rubra	Galium lanceolatum	Prenanthes alba
Adiantum pedatum	Galium triflorum	Pteridium aquilinum
Allium tricoccum	Gaultheria procumbens	Pyrola elliptica
✓ Anemone quinquefolia	Gaylussacia baccata	Pyrola rotundifolia
Aquilegia canadensis	Geranium maculatum	Pyrola secunda
Aralia nudicaulis	Geum canadense	Ranunculus recurvatus
Aralia racemosa	Gnaphalium obtusifolium	Rhus radicans
Arisaema atrorubens	Helianthemum sp.	Ribes americanum
✓ Aster macrophyllus	Helianthus strumosus	Rosa sp.
Aster sagittifolius	Hepatica acutiloba	Rubus parviflorus
Athyrium angustum	✓ Hepatica americana	Rubus (blackberry)
Botrychium virginianum	Impatiens biflora	✓ Rubus (dewberry)
Brachyelytrum erectum	Linnaea borealis	Sambucus pubens
Carex albursina	Lonicera oblongifolia	Sanguinaria canadensis
Caulophyllum thalictroides	Lupinus perennis	Sanicula gregaria
Chimaphila umbellata	Lycopodium annotinum	Smilacina racemosa
Circaea alpina	Lycopodium complanatum	Smilacina stellata
Circaea latifolia	Lycopodium lucidulum	Smilax ecirrhata
Clintonia borealis	Lycopodium obscurum	Solidago ulmifolia
Coptis trifolia	Lysimachia quadrifolia	Streptopus roseus
Corallorrhiza maculata	✓ Maianthemum canadense	Taxus canadensis
Cornus alternifolia	✓ Mitchella repens	Thalictrum dioicum
Cornus canadensis	Mitella diphylla	Trientalis borealis
Cornus rugosa	Mitella nuda	Trillium grandiflorum
Corylus americana	Monotropa uniflora	Uvularia grandiflora
Corylus cornuta	Myrica asplenifolia	Uvularia sessilifolia
Cypripedium acaule	Onoclea sensibilis	Vaccinium angustifolium
Diervilla lonicera	✓ Oryzopsis asperifolia	Vaccinium pennsylvanicum
Dirca palustris	Osmorhiza claytoni	✓ Viburnum acerifolium
Dryopteris linnaeana	Oxalis montana	Viola canadensis
Dryopteris phegopteris	Phryma leptostachya	Viola cucullata
Dryopteris spinulosa	Polygala pauciflora	Viola pallens
Epifagus virginiana	Polygonatum commutatum	Viola pubescens
Epigaea repens	Polygonatum pubescens	Waldsteinia fragarioides

HERB FREQUENCY

NORTHERN PINE-HARDWOODS

Stand No.
Quadrat No. 7

Actaea pachypoda	✓ <i>Fragaria virginiana</i>	<i>Potentilla simplex</i>
Actaea rubra	<i>Galium lanceolatum</i>	<i>Prenanthes alba</i>
Adiantum pedatum	<i>Galium triflorum</i>	<i>Pteridium aquilinum</i>
Allium tricoccum	✓ <i>Gaultheria procumbens</i>	<i>Pyrola elliptica</i>
Anemone quinquefolia	<i>Gaylussacia baccata</i>	<i>Pyrola rotundifolia</i>
Aquilegia canadensis	<i>Geranium maculatum</i>	<i>Pyrola secunda</i>
Aralia nudicaulis	<i>Geum canadense</i>	<i>Ranunculus recurvatus</i>
Aralia racemosa	<i>Gnaphalium obtusifolium</i>	<i>Rhus radicans</i>
Arisaema atrorubens	<i>Helianthemum sp.</i>	<i>Ribes americanum</i>
Aster macrophyllus	<i>Helianthus strumosus</i>	<i>Rosa sp.</i>
Aster sagittifolius	<i>Hepatica acutiloba</i>	<i>Rubus parviflorus</i>
Athyrium angustum	<i>Hepatica americana</i>	<i>Rubus (blackberry)</i>
Botrychium virginianum	<i>Impatiens biflora</i>	<i>Rubus (dewberry)</i>
Brachyelytrum erectum	✓ <i>Linnaea borealis</i>	<i>Sambucus pubens</i>
Carex albursina	<i>Lonicera oblongifolia</i>	<i>Sanguinaria canadensis</i>
Caulophyllum thalictroides	<i>Lupinus perennis</i>	<i>Sanicula gregaria</i>
Chimaphila umbellata	<i>Lycopodium annotinum</i>	<i>Smilacina racemosa</i>
Circaea alpina	<i>Lycopodium complanatum</i>	<i>Smilacina stellata</i>
Circaea latifolia	<i>Lycopodium lucidulum</i>	<i>Smilax ecirrhata</i>
Clintonia borealis	<i>Lycopodium obscurum</i>	<i>Solidago ulmifolia</i>
Coptis trifolia	<i>Lysimachia quadrifolia</i>	<i>Streptopus roseus</i>
Corallorrhiza maculata	✓ <i>Maianthemum canadense</i>	<i>Taxus canadensis</i>
Cornus alternifolia	<i>Mitchella repens</i>	<i>Thalictrum dioicum</i>
Cornus canadensis	<i>Mitella diphylla</i>	<i>Trientalis borealis</i>
Cornus rugosa	<i>Mitella nuda</i>	<i>Trillium grandiflorum</i>
Corylus americana	<i>Monotropa uniflora</i>	<i>Uvularia grandiflora</i>
Corylus cornuta	<i>Myrica asplenifolia</i>	<i>Uvularia sessilifolia</i>
Cypripedium acaule	<i>Onoclea sensibilis</i>	<i>Vaccinium angustifolium</i>
✓ <i>Diervilla lonicera</i>	✓ <i>Oryzopsis asperifolia</i>	<i>Vaccinium pennsylvanicum</i>
<i>Dirca palustris</i>	<i>Osmorhiza claytoni</i>	<i>Viburnum acerifolium</i>
<i>Dryopteris linnaeana</i>	<i>Oxalis montana</i>	<i>Viola canadensis</i>
<i>Dryopteris phegopteris</i>	<i>Phryma leptostachya</i>	<i>Viola cucullata</i>
<i>Dryopteris spinulosa</i>	<i>Polygala pauciflora</i>	<i>Viola pallens</i>
<i>Epifagus virginiana</i>	<i>Polygonatum commutatum</i>	<i>Viola pubescens</i>
<i>Epigaea repens</i>	<i>Polygonatum pubescens</i>	<i>Waldsteinia fragarioides</i>

✓ *Schizachne*✓ *Poa sp*

HERB FREQUENCY

NORTHERN PINE-HARDWOODS

Stand No.

Quadrat No. 8

3096

Actaea pachypoda
 Actaea rubra
 Adiantum pedatum
 Allium tricoccum
 ✓ Anemone quinquefolia
 Aquilegia canadensis
 ✓ Aralia nudicaulis
 Aralia racemosa
 Arisaema atrorubens
 ✓ Aster macrophyllus
 Aster sagittifolius
 Athyrium angustum
 Botrychium virginianum
 Brachyelytrum erectum
 Carex albursina
 Caulophyllum thalictroides
 Chimaphila umbellata
 Circaea alpina
 Circaea latifolia
 Clintonia borealis
 Coptis trifolia
 Corallorrhiza maculata
 Cornus alternifolia
 Cornus canadensis
 Cornus rugosa
 Corylus americana
 Corylus cornuta
 Cypripedium acaule
 ✓ Diervilla lonicera
 Dirca palustris
 Dryopteris linnaeana
 Dryopteris phegopteris
 Dryopteris spinulosa
 Epifagus virginiana
 Epigaea repens

✓ Fragaria virginiana
 Galium lanceolatum
 Galium triflorum
 ✓ Gaultheria procumbens
 Gaylussacia baccata
 Geranium maculatum
 Geum canadense
 Gnaphalium obtusifolium
 Helianthemum sp.
 Helianthus strumosus
 Hepatica acutiloba
 Hepatica americana
 Impatiens biflora
 Linnaea borealis
 ✓ Lonicera oblongifolia
 Lupinus perennis
 Lycopodium annotinum
 Lycopodium complanatum
 Lycopodium lucidulum
 Lycopodium obscurum
 Lysimachia quadrifolia
 ✓ Maianthemum canadense
 Mitchella repens
 Mitella diphylla
 Mitella nuda
 Monotropa uniflora
 Myrica asplenifolia
 Onoclea sensibilis
 ✓ Oryzopsis asperifolia
 Osmorhiza claytoni
 Oxalis montana
 Phryma leptostachya
 Polygala pauciflora
 Polygonatum commutatum
 ✓ Polygonatum pubescens

Potentilla simplex
 Prenanthes alba
 Pteridium aquilinum
 Pyrola elliptica
 Pyrola rotundifolia
 Pyrola secunda
 Ranunculus recurvatus
 Rhus radicans
 Ribes americanum
 Rosa sp.
 Rubus parviflorus
 ✓ Rubus (blackberry)
 Rubus (dewberry)
 Sambucus pubens
 Sanguinaria canadensis
 Sanicula gregaria
 Smilacina racemosa
 Smilacina stellata
 Smilax ecirrhata
 Solidago ulmifolia
 Streptopus roseus
 Taxus canadensis
 Thalictrum dioicum
 Trientalis borealis
 Trillium grandiflorum
 Uvularia grandiflora
 Uvularia sessilifolia
 Vaccinium angustifolium
 Vaccinium pennsylvanicum
 ✓ Viburnum acerifolium
 Viola canadensis
 Viola cucullata
 Viola pallens
 Viola pubescens
 Waldsteinia fragarioides

✓ Viola sp.

HERB FREQUENCY

NORTHERN PINE-HARDWOODS

Stand No. 3096
Quadrat No. 7

Actaea pachypoda	Fragaria virginiana	Potentilla simplex
Actaea rubra	Galium lanceolatum	Prenanthes alba
Adiantum pedatum	Galium triflorum	Pteridium aquilinum
Allium tricoccum	Gaultheria procumbens	Pyrola elliptica
✓ Anemone quinquefolia	Gaylussacia baccata	Pyrola rotundifolia
Aquilegia canadensis	Geranium maculatum	Pyrola secunda
Aralia nudicaulis	Geum canadense	Ranunculus recurvatus
Aralia racemosa	Gnaphalium obtusifolium	Rhus radicans
Arisaema atrorubens	Helianthemum sp.	Ribes americanum
✓ Aster macrophyllus	Helianthus strumosus	Rosa sp.
Aster sagittifolius	Hepatica acutiloba	Rubus parviflorus
Athyrium angustum	✓ Hepatica americana	✓ Rubus (blackberry)
Botrychium virginianum	Impatiens biflora	Rubus (dewberry)
Brachyelytrum erectum	Linnaea borealis	Sambucus pubens
Carex albursina	✓ Lonicera oblongifolia	Sanguinaria canadensis
Caulophyllum thalictroides	Lupinus perennis	Sanicula gregaria
Chimaphila umbellata	Lycopodium annotinum	Smilacina racemosa
Circaea alpina	Lycopodium complanatum	Smilacina stellata
Circaea latifolia	Lycopodium lucidulum	Smilax ecirrhata
Clintonia borealis	Lycopodium obscurum	Solidago ulmifolia
Coptis trifolia	Lysimachia quadrifolia	Streptopus roseus
Corallorrhiza maculata	✓ Maianthemum canadense	Taxus canadensis
Cornus alternifolia	Mitchella repens	Thalictrum dioicum
Cornus canadensis	Mitella diphylla	Trientalis borealis
Cornus rugosa	Mitella nuda	Trillium grandiflorum
Corylus americana	Monotropa uniflora	Uvularia grandiflora
Corylus cornuta	Myrica asplenifolia	Uvularia sessilifolia
Cypripedium acaule	Onoclea sensibilis	Vaccinium angustifolium
✓ Diervilla lonicera	✓ Oryzopsis asperifolia	Vaccinium pennsylvanicum
Dirca palustris	Osmorhiza claytoni	Viburnum acerifolium
Dryopteris linnaeana	Oxalis montana	Viola canadensis
Dryopteris phegopteris	Phryma leptostachya	Viola cucullata
Dryopteris spinulosa	Polygala pauciflora	Viola pallens
Epifagus virginiana	Polygonatum commutatum	Viola pubescens
Epigaea repens	Polygonatum pubescens	Waldsteinia fragarioides

HERB FREQUENCY

NORTHERN PINE-HARDWOODS

Stand No. 3096
Quadrat No. 10

Actaea pachypoda	Fragaria virginiana	Potentilla simplex
Actaea rubra	Galium lanceolatum	Prenanthes alba
Adiantum pedatum	Galium triflorum	✓ Pteridium aquilinum
Allium tricoccum	Gaultheria procumbens	Pyrola elliptica
✓ Anemone quinquefolia	Gaylussacia baccata	✓ Pyrola rotundifolia
Aquilegia canadensis	Geranium maculatum	Pyrola secunda
Aralia nudicaulis	Geum canadense	Ranunculus recurvatus
Aralia racemosa	Gnaphalium obtusifolium	Rhus radicans
Arisaema atrorubens	Helianthemum sp.	Ribes americanum
✓ Aster macrophyllus	Helianthus strumosus	Rosa sp.
Aster sagittifolius	Hepatica acutiloba	Rubus parviflorus
Athyrium angustum	✓ Hepatica americana	✓ Rubus (blackberry)
Botrychium virginianum	Impatiens biflora	Rubus (dewberry)
Brachyelytrum erectum	Linnaea borealis	Sambucus pubens
Carex albursina	Lonicera oblongifolia	Sanguinaria canadensis
Caulophyllum thalictroides	Lupinus perennis	Sanicula gregaria
Chimaphila umbellata	Lycopodium annotinum	Smilacina racemosa
Circaea alpina	Lycopodium complanatum	Smilacina stellata
Circaea latifolia	Lycopodium lucidulum	Smilax ecirrhata
Clintonia borealis	Lycopodium obscurum	Solidago ulmifolia
Coptis trifolia	Lysimachia quadrifolia	Streptopus roseus
Corallorrhiza maculata	✓ Maianthemum canadense	Taxus canadensis
Cornus alternifolia	✓ Mitchella repens	Thalictrum dioicum
Cornus canadensis	Mitella diphylla	Trientalis borealis
Cornus rugosa	Mitella nuda	Trillium grandiflorum
Corylus americana	Monotropa uniflora	Uvularia grandiflora
Corylus cornuta	Myrica asplenifolia	Uvularia sessilifolia
Cypripedium acaule	Onoclea sensibilis	Vaccinium angustifolium
Diervilla lonicera	✓ Oryzopsis asperifolia	Vaccinium pennsylvanicum
Dirca palustris	Osmorhiza claytoni	Viburnum acerifolium
Dryopteris linnaeana	Oxalis montana	Viola canadensis
Dryopteris phegopteris	Phryma leptostachya	Viola cucullata
Dryopteris spinulosa	Polygala pauciflora	Viola pallens
Epifagus virginiana	Polygonatum commutatum	Viola pubescens
Epigaea repens	Polygonatum pubescens	Waldsteinia fragarioides

PRESENCE LIST

NORTHERN PINE-HARDWOODS

STAND NO.

- ✓ *Abies balsamea*
- ✓ *Acer rubrum*
- ✓ *Acer saccharum*
- ✓ *Acer spicatum*
- ✓ *Amelanchier* sp.
- ✓ *Betula lutea*
- ✓ *Betula papyrifera*
- ✓ *Caprinus caroliniana*
- ✓ *Carya cordiformis*
- Crategeus* sp.
- Fagus grandiflora*
- ✓ *Fraxinus americana*
- ✓ *Fraxinus nigra*

- Fraxinus pennsylvanica*
- Juglans cinerea*
- Larix laricina*
- Ostrya virginiana*
- ✓ *Picea glauca*
- Pinus banksiana*
- ✓ *Pinus resinosa*
- ✓ *Pinus strobus*
- Populus balsamifera*
- ✓ *Populus grandidentata*
- Populus tremuloides*
- Prunus pennsylvanica*
- ✓ *Prunus serotina*

- ✓ *Prunus virginiana*
- Quercus alba*
- Quercus ellipsoidalis*
- Quercus macrocarpa*
- ✓ *Quercus rubra*
- Sorbus decora*
- Thuja occidentalis*
- ✓ *Tilia americana*
- ✓ *Tsuga canadensis*
- Ulmus americana*
- Ulmus fulva*

HERBS AND SHRUBS

- ✓ *Actaea pachypoda*
- ✓ *Actaea rubra*
- Adiantum pedatum*
- Agrimonia gryposepala*
- Allium tricoccum*
- Alnus rugosa*
- Amphicarpa bracteata*
- Anemone canadensis*
- ✓ *Anemone quinquefolia*
- Antennaria* sp.
- ✓ *Apocynum androsaemifolium*
- Apocynum cannabinum*
- Aquilegia canadensis*
- ✓ *Aralia nudicaulis*
- Aralia racemosa*
- Arctostaphylos uva-ursi*
- Arisaema atrorubens*
- Asarum canadense*
- Asclepias phytoelaccoides*
- Aster cordifolius*
- Aster lateriflorus*
- ✓ *Aster macrophyllus*
- Aster prenanthoides*
- Aster sagittifolius*
- Aster shortii*
- Aster umbellatus*
- ✓ *Athyrium angustum*
- Aureolaria pedicularia*
- Boehmeria cylindrica*
- ✓ *Botrychium virginianum*
- Brachyelytrum erectum*
- Bromus purgans*
- Campanula americana*
- Carex albursina*
- Carex pensylvanica*
- Caulophyllum thalictroides*
- Celastrus scandens*
- ✓ *Chimaphila umbellata*
- Chiogenes hispida*

- Circaea alpina*
- Circaea latifolia*
- Claytonia caroliniana*
- Claytonia virginiana*
- ✓ *Clintonia borealis*
- Convolvulus spithameus*
- Coptis trifolia*
- Corallorrhiza maculata*
- Corallorrhiza striata*
- ✓ *Cornus alternifolia*
- ✓ *Cornus canadensis*
- Cornus femina*
- Cornus rugosa*
- Corylus americana*
- ✓ *Corylus cornuta*
- Cryptotaenia canadensis*
- Cypripedium acaule*
- Cypripedium pubescens*
- Cystopteris fragilis*
- Danthonia spicata*
- Dentaria diphylla*
- Desmodium glutinosum*
- Desmodium nudiflorum*
- Dicentra canadensis*
- Dicentra cucullaria*
- ✓ *Diervilla lonicera*
- Dirca palustris*
- Dryopteris linneana*
- ✓ *Dryopteris phegopteris*
- ✓ *Dryopteris spinulosa*
- Epifagus virginiana*
- Epigaea repens*
- ✓ *Equisetum arvense* *sp. ?*
- Erythronium americanum*
- ✓ *Fragaria virginiana*
- Galium aparine*
- Galium boreale*
- Galium circaezans*
- Galium concinnum*

- Galium lanceolatum*
- ✓ *Galium triflorum*
- ✓ *Gaultheria procumbens*
- Gaylussacia baccata*
- Geranium maculatum*
- Geum canadense*
- Gnaphalium obtusifolium*
- Goodyera pubescens*
- Goodyera repens*
- Habenaria bracteata*
- ✓ *Hamamelis virginiana*
- Helianthus strumosus*
- Hepatica acutiloba*
- ✓ *Hepatica americana*
- Hieracium canadense*
- Hydrophyllum virginianum*
- Hystrix patula*
- ✓ *Impatiens biflora* *sp.*
- Lactuca canadensis*
- Laportea canadensis*
- Lappula virginica*
- Lathyrus ochroleucus*
- Ledum groenlandicum*
- ✓ *Linnaea borealis*
- Lonicera canadensis*
- Lonicera hirsuta*
- ✓ *Lonicera oblongifolia*
- ✓ *Lonicera prolifera* *?*
- ✓ *Luzula multiflora*
- Lycopodium annotinum*
- Lycopodium clavatum*
- Lycopodium complanatum*
- Lycopodium lucidulum*
- ✓ *Lycopodium obscurum*
- Lycopodium tristachyum*
- Lycopus americanus*
- Lycopus uniflora*
- Lysimachia quadrifolia*
- ✓ *Maianthemum canadense*

Melampyrum lineare
 ✓ Mitchellia repens
 Mitella diphylla
 Mitella nuda
 Monarda fistulosa
 ✓ Moneses uniflora
 Monotropa uniflora
 Myrica asplenifolia
 ✓ Onoclea sensibilis
 ✓ Oryzopsis asperifolia
 Osmorhiza claytoni
 ✓ Osmunda cinnamomea
 ✓ Osmunda claytoniana
 Oxalis montana
 ✓ Panax quinquefolia
 Parietaria pennsylvanica
 ✓ Parthenocissus vitacea
 Pedicularis lanceolata
 Phytolacca leptostachya
 Podophyllum peltatum
 Polemonium reptans
 Polygala pauciflora
 Polygonatum commutatum
 ✓ Polygonatum pubescens
 Potentilla simplex
 ✓ Prenanthes alba
 Pteritis nodulosa
 ✓ Pteridium aquilinum

✓ Pyrola elliptica
 ✓ Pyrola rotundifolia
 ✓ Pyrola secunda
 Ranunculus abortivus
 Ranunculus recurvatus
 Ranunculus septentrionalis
 Rhus radicans
 Rhus typhina
 Ribes americanum
 ✓ Ribes cynosbati
 Ribes lacustre
 Ribes triste
 Rubus idaeus
 Rubus parviflorus
 Rubus hispidus
 ✓ Rubus - blackberry *allegheniensis*
 ✓ Rubus - dewberry
 Rubus - raspberry
 Sambucus canadensis
 Sambucus pubens
 Sanguinaria canadensis
 Sanicula gregaria
 Schizachne purpurascens
 ✓ Scutellaria lateriflora
 Shepherdia canadensis
 Smilacina racemosa
 Smilacina stellata
 Smilax ecirrhata

Smilax herbacea
 Smilax hispida
 Solidago latifolia
 Solidago ulmifolia
 Streptopus amplexifolius
 ✓ Streptopus roseus
 Taxus canadensis
 Thalictrum dioicum
 Tiarella cordifolia
 ✓ Trientalis borealis
 ✓ Trillium cernuum
 ✓ Trillium grandiflorum
 Uvularia grandiflora
 Uvularia sessilifolia
 ✓ Vaccinium angustifolium
 Vaccinium pennsylvanicum
 ✓ Viburnum acerifolium
 ✓ Viburnum affine
 Viburnum lentago
 Viola canadensis
 ✓ Viola cucullata
 Viola incognita
 Viola pallens
 ✓ Viola pubescens
 Vitis aestivalis
 Vitis riparia
 Waldsteinia fragarioides
 Zanthoxylum americanum

Additional Species:

Ilex verticillata

Viola conspersa

Stemoneura ciliata

Senecio aureus

Geum rivale

✓

THE CORTICOLOUS VEGETATION OF THE NORTHERN WISCONSIN UPLAND
Data collected by William L. Culberson, Summers 1952-1953.

From a 40-tree sample, the continuum index of this stand is ¹³⁸⁹.....
Abbreviations in the data sheet refer to the following species:

Alectoria nidulifera
Allarthonia caesia
Anaptychia palmatula
Anaptychia speciosa
Arthonia radiata
Bacidia chlorococca
Bacidia fuscobubella
Bacidia sp.
Buellia punctata
Buellia stillingiana
Caloplaca aurantiaca
Caloplaca cerina
Caloplaca sp.
Candelaria concolor
Candelaria fibrosa
Cetraria atlantica
Cetraria ciliaris
Cetraria fendleri
Cetraria oakesiana
Cetraria pinastri
Cladonia botrytes
Cladonia cenotea
Cladonia chlorophaea
Cladonia coniocraea
Cladonia cristatella
Cladonia verticillata
Collema subfurvum
Conotrema urceolatum
Evernia mesomorpha
Graphis scripta
Lecanora pallida
Lecanora subfusca
Lecanora varia
Lecidea berengeriana
Lecidea nylanderii
Lecidea vernalis
Lepraria aeruginosa
Leptorhaphis epidermidis
Le sym = unknown crustose
Lobaria pulmonaria
Lobaria quercizans
Normandina pulchella
Ochrolechia pallescens
Opegrapha varia
Parmelia andreana
Parmelia aurulenta
Parmelia borrieri
Parmelia caperata
Parmelia cetrarioides
Parmelia crinita
Parmelia physodes
Parmelia rudecta

Parmelia saxatilis
Parmelia subaurifera
Parmelia subquercifolia
Parmelia sulcata
Parmelia trichotera
Parmeliopsis ambigua
Parmeliopsis hyperopta
Parmeliopsis placodoria
Peltigera canina
Pertusaria sp.
Physcia aipolia
Physcia ascendens
Physcia ciliata
Physcia grisea
Physcia millegrana
Physcia orbicularis
Physcia syncolla
Physcia tribacoides
Pyrenula leucoplaca
Pyrenula nitida
Pyxine sorediata
Ramalina fastigiata
Ramalina pollinaria
Rinodina halei
Rinodina papillata
Rinodina sp.
Trypethelium virens
Usnea sp.
Xanthoria fallax
Xanthoria polycarpa

(Bryophytes)

Amblystegium varium
Anomodon attenuatus
Anomodon minor
Anomodon rostratus
Anomodon tristis
Bazzania trilobata
Brachythecium sp.
Brotherella recurvans
Campylium hispidulum
Chamberlainia acuminata
Dicranum flagellare
Dicranum montanum
Dicranum sp.
Entodon sp.
Eurhynchium serrulatum
Eurhynchium strigosum
Frullania asagrayana
Frullania bolanderi
Frullania eboraensis
Heterophyllum
haldanianum
Hypnum reptile
Hypnum sp.
Jamesoniella autumnalis
Leskea sp.
Leucodon sciuroides
Lindbergia brachyptera
var. austinii
Lophocolea heterophylla
Mnium cuspidatum
Mnium spinulosum
Neckera pennata
Orthotrichum sp.
Plagiochila asplenioides
Plagiothecium sp.
Platygyrium repens
Porella platy-
phyllodea
Ptilidium pulcherrimum
Pylasia sp.
Radula complanata
Tetraphis pellucida
Thuidium delicatulum
Ulota crispa

No. trees / / 12 21 1 1 3

	Ac rub	Ac sac	Be lut	Be pap	Fa gra	Os vir	Pi ban	Pi res	Pi str	Po gra	Po tre	Pr ser	Qu alb	Qu ell	Qu rub	Ti ame	Ts can	Ul ame	Ab el	Total	Frequency
Al nid									2											2	5
Ba chl								1	6											7	18
Ba fus															1					1	3
Ce atl									15											15	38
Ce cil									13											13	33
Cl con								4	3											7	18
Ev mes								1	6											7	18
Gr sor																1				1	5
Le sub									12											12	30
Le sym																1				1	3
Le var								2	1									1		4	10
Pa aur		1														1				2	5
Pa cap								10	17	1						1		3		32	80
Pa phy								1	14											15	38
Pa rud								4	2							1		1		8	20
Pa sax								1	11											12	30
Pa sul								2	4											6	15
Pe sp.									2											2	5
Ph erb		1																		1	3
Us sp.									8											8	20
Gu con		1																		1	3
Ce neg	1	1						12	21	1					1			2		39	98
	1	4						38	137	2					7			7		196	
Di mon								5	14											19	48
Fr asa								1	10											11	28
Er ebo		1								1					1			1		4	10
Hy rep								1												1	3
Ne pen															1					1	3
Pl rep								3	12	1					1					17	43
Pt pul								4	12											16	40
	0	1						14	48	2					3			1		69	